

CLAIMS:

1. A coordinate measuring device having a probe comprising a stylus (14) with a sensing member (18) for contacting the object (15) to be measured, a support unit (13) to which the stylus (14) is connected through elastic means (19), and magnet means (46) for damping vibrations of the stylus (14) by generating eddy currents in conductive material, characterized in that the elastic means (19) comprise at least one leaf spring (41) made of conductive material, and in that said magnet means (46) generate eddy currents in said leaf spring (41).
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- 10 2. A coordinate measuring device as claimed in claim 1, characterized in that said conductive material is a nonmagnetic material.
- 15 3. A coordinate measuring device as claimed in any one of the preceding claims, characterized in that the conductive material is aluminum or an aluminum alloy, or copper or a copper alloy.
- 20 4. A coordinate measuring device as claimed in any one of the preceding claims, characterized in that a leaf spring (41) comprises two portions positioned inclined to each other, an outer portion (44) being connected to the support unit (13) and an inner portion (45) being connected to the stylus (14).
- 25 5. A coordinate measuring device as claimed in any one of the preceding claims, characterized in that the elastic means (19) comprise a number of leaf springs (41) made out of one sheet of material.
6. A coordinate measuring device as claimed in any one of the preceding claims, characterized in that the configuration of the leaf springs (41) is rotationally symmetrical, having an axis of symmetry perpendicular to the plane of the leaf springs (41).

7. A coordinate measuring device as claimed in any one of the preceding claims, characterized in that the elastic means (19) comprise two spaced-apart spring members (52), each comprising leaf springs (41), and in that the magnet means (46) are located between the two spring members (52).

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8. A coordinate measuring device as claimed in claim 7, characterized in that each spring member (52) comprises a number of leaf springs (41) made out of one sheet of material, while the spring members (52) are located parallel to each other.

10 9. A coordinate measuring device as claimed in any one of the preceding claims, characterized in that the magnet means (46) comprise a number of permanent magnets.

10. A coordinate measuring device as claimed in claim 9, characterized in that the permanent magnets are incorporated in a plate (46) of nonmagnetic material.

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11. A coordinate measuring device as claimed in claim 9 or 10, characterized in that the permanent magnets are positioned in an array (49,50), adjacent to each other.

20 12. A coordinate measuring device as claimed in claim 10 or 11, characterized in that the magnetic axes of said permanent magnets are positioned in the plane of said plate (46) and perpendicular to the array (49,50).

25 13. A method of measuring the position of an object (15), whereby the object is contacted by a stylus (14) of a probe, the probe comprising the stylus (14) with a sensing member (18), a support unit (13) to which the stylus (14) is connected through elastic means (19), and magnet means (46) for damping vibrations of the stylus (14) by generating eddy currents in conductive material, characterized in that the elastic means (19) comprise at least one leaf spring (41) made of conductive material, and in that said magnet means generate eddy currents in said leaf spring (41).